SEQUENCE LISTING

<110> Roche Diagnostics GmbH

<120> Method for producing an active heterodimeric AMV-RT in prokaryotic cells

<130> 5272/00/

<140>
<141>

<160> 22

<170> PatentIn Ver. 2.1

<210> 1
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 1   38
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<210> 2
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 2   40
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<210> 3
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 3   41
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<210> 4
<211> 1716
<212> DNA
<213> Avian Myeloblastosis Virus

<400> 4
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1

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<210> 5
<211> 2574
<212> DNA
<213> Avian Myeloblastosis Virus

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2

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<210> 6
<211> 572
<212> PRT
<213> Avian Myeloblastosis Virus

<400> 6

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        20                  25                  30

Ala Leu Thr Gln Leu Val Glu Lys Glu Leu Gln Leu Gly His Ile Glu
    35                  40                  45

Pro Ser Leu Ser Cys Trp Asn Thr Pro Val Phe Val Ile Arg Lys Ala
    50                  55                  60

Ser Gly Ser Tyr Arg Leu Leu His Asp Leu Arg Ala Val Asn Ala Lys
65                  70                  75                  80

Leu Val Pro Phe Gly Ala Val Gln Gln Gly Ala Pro Val Leu Ser Ala
                85                  90                  95

Leu Pro Arg Gly Trp Pro Leu Met Val Leu Asp Leu Lys Asp Cys Phe
            100                 105                 110

Phe Ser Ile Pro Leu Ala Glu Gln Asp Arg Glu Ala Phe Ala Phe Thr
        115                 120                 125

Leu Pro Ser Val Asn Asn Gln Ala Pro Ala Arg Arg Phe Gln Trp Lys
    130                 135                 140

Val Leu Pro Gln Gly Met Thr Cys Ser Pro Thr Ile Cys Gln Leu Ile
145                 150                 155                 160

Val Gly Gln Ile Leu Glu Pro Leu Arg Leu Lys His Pro Ser Leu Arg
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3

165   170   175
Met Leu His Tyr Met Asp Asp Leu Leu Leu Ala Ala Ser Ser His Asp
             180   185   190

Gly Leu Glu Ala Ala Gly Glu Glu Val Ile Ser Thr Leu Glu Arg Ala
             195   200   205

Gly Phe Thr Ile Ser Pro Asp Lys Val Gln Arg Glu Pro Gly Val Gln
             210   215   220

Tyr Leu Gly Tyr Lys Leu Gly Ser Thr Tyr Val Ala Pro Val Gly Leu
225   230   235   240

Val Ala Glu Pro Arg Ile Ala Thr Leu Trp Asp Val Gln Lys Leu Val
                    245   250   255

Gly Ser Leu Gln Trp Leu Arg Pro Ala Leu Gly Ile Pro Pro Arg Leu
             260   265   270

Met Gly Pro Phe Tyr Glu Gln Leu Arg Gly Ser Asp Pro Asn Glu Ala
             275   280   285

Arg Glu Trp Asn Leu Asp Met Lys Met Ala Trp Arg Glu Ile Val Gln
             290   295   300

Leu Ser Thr Thr Ala Ala Leu Glu Arg Trp Asp Pro Ala Leu Pro Leu
305   310   315   320

Glu Gly Ala Val Ala Arg Cys Glu Gln Gly Ala Ile Gly Val Leu Gly
                    325   330   335

Gln Gly Leu Ser Thr His Pro Arg Pro Cys Leu Trp Leu Phe Ser Thr
             340   345   350

Gln Pro Thr Lys Ala Phe Thr Ala Trp Leu Glu Val Leu Thr Leu Leu
             355   360   365

Ile Thr Lys Leu Arg Ala Ser Ala Val Arg Thr Phe Gly Lys Glu Val
             370   375   380

Asp Ile Leu Leu Leu Pro Ala Cys Phe Arg Glu Asp Leu Pro Leu Pro
385   390   395   400

Glu Gly Ile Leu Leu Ala Leu Arg Gly Phe Ala Gly Lys Ile Arg Ser
             405   410   415

Ser Asp Thr Pro Ser Ile Phe Asp Ile Ala Arg Pro Leu His Val Ser
             420   425   430

Leu Lys Val Arg Val Thr Asp His Pro Val Pro Gly Pro Thr Val Phe
             435   440   445

Thr Asp Ala Ser Ser Ser Thr His Lys Gly Val Val Val Trp Arg Glu
             450   455   460

Gly Pro Arg Trp Glu Ile Lys Glu Ile Ala Asp Leu Gly Ala Ser Val

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465                      470                   475                      480
Gln Gln Leu Glu Ala Arg Ala Val Ala Met Ala Leu Leu Leu Trp Pro
                    485                   490                   495

Thr Thr Pro Thr Asn Val Val Thr Asp Ser Ala Phe Val Ala Lys Met
              500                   505                   510

Leu Leu Lys Met Gly Gln Glu Gly Val Pro Ser Thr Ala Ala Ala Phe
              515                   520                   525

Ile Leu Glu Asp Ala Leu Ser Gln Arg Ser Ala Met Ala Ala Val Leu
        530                   535                   540

His Val Arg Ser His Ser Glu Val Pro Gly Phe Phe Thr Glu Gly Asn
                    550                   555                   560
545

Asp Val Ala Asp Ser Gln Ala Thr Phe Gln Ala Tyr
                565                   570
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<210> 7
<211> 858
<212> PRT
<213> Avian Myeloblastosis Virus

<400> 7

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Thr Val Ala Leu His Leu Ala Ile Pro Leu Lys Trp Lys Pro Asn His
1               5                   10                      15

Thr Pro Val Trp Ile Asp Gln Trp Pro Leu Pro Glu Gly Lys Leu Val
              20                  25                  30

Ala Leu Thr Gln Leu Val Glu Lys Glu Leu Gln Leu Gly His Ile Glu
        35                  40                  45

Pro Ser Leu Ser Cys Trp Asn Thr Pro Val Phe Val Ile Arg Lys Ala
        50                  55                  60

Ser Gly Ser Tyr Arg Leu Leu His Asp Leu Arg Ala Val Asn Ala Lys
65                  70                  75                      80

Leu Val Pro Phe Gly Ala Val Gln Gln Gly Ala Pro Val Leu Ser Ala
                85                  90                      95

Leu Pro Arg Gly Trp Pro Leu Met Val Leu Asp Leu Lys Asp Cys Phe
            100                 105                 110

Phe Ser Ile Pro Leu Ala Glu Gln Asp Arg Glu Ala Phe Ala Phe Thr
            115                 120                 125

Leu Pro Ser Val Asn Asn Gln Ala Pro Ala Arg Arg Phe Gln Trp Lys
            130                 135                 140

Val Leu Pro Gln Gly Met Thr Cys Ser Pro Thr Ile Cys Gln Leu Ile
145                 150                 155                     160

Val Gly Gln Ile Leu Glu Pro Leu Arg Leu Lys His Pro Ser Leu Arg
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5

Met Leu His Tyr Met Asp Asp Leu Leu Leu Ala Ala Ser Ser His Asp
180   185   190

Gly Leu Glu Ala Ala Gly Glu Glu Val Ile Ser Thr Leu Glu Arg Ala
195   200   205

Gly Phe Thr Ile Ser Pro Asp Lys Val Gln Arg Glu Pro Gly Val Gln
210   215   220

Tyr Leu Gly Tyr Lys Leu Gly Ser Thr Tyr Val Ala Pro Val Gly Leu
225   230   235   240

Val Ala Glu Pro Arg Ile Ala Thr Leu Trp Asp Val Gln Lys Leu Val
245   250   255

Gly Ser Leu Gln Trp Leu Arg Pro Ala Leu Gly Ile Pro Pro Arg Leu
260   265   270

Met Gly Pro Phe Tyr Glu Gln Leu Arg Gly Ser Asp Pro Asn Glu Ala
275   280   285

Arg Glu Trp Asn Leu Asp Met Lys Met Ala Trp Arg Glu Ile Val Gln
290   295   300

Leu Ser Thr Thr Ala Ala Leu Glu Arg Trp Asp Pro Ala Leu Pro Leu
305   310   315   320

Glu Gly Ala Val Ala Arg Cys Glu Gln Gly Ala Ile Gly Val Leu Gly
325   330   335

Gln Gly Leu Ser Thr His Pro Arg Pro Cys Leu Trp Leu Phe Ser Thr
340   345   350

Gln Pro Thr Lys Ala Phe Thr Ala Trp Leu Glu Val Leu Thr Leu Leu
355   360   365

Ile Thr Lys Leu Arg Ala Ser Ala Val Arg Thr Phe Gly Lys Glu Val
370   375   380

Asp Ile Leu Leu Leu Pro Ala Cys Phe Arg Glu Asp Leu Pro Leu Pro
385   390   395   400

Glu Gly Ile Leu Leu Ala Leu Arg Gly Phe Ala Gly Lys Ile Arg Ser
405   410   415

Ser Asp Thr Pro Ser Ile Phe Asp Ile Ala Arg Pro Leu His Val Ser
420   425   430

Leu Lys Val Arg Val Thr Asp His Pro Val Pro Gly Pro Thr Val Phe
435   440   445

Thr Asp Ala Ser Ser Ser Thr His Lys Gly Val Val Val Trp Arg Glu
450   455   460

Gly Pro Arg Trp Glu Ile Lys Glu Ile Ala Asp Leu Gly Ala Ser Val

480
                                        475
                  470
465
Gln Gln Leu Glu Ala Arg Ala Val Ala Met Ala Leu Leu Leu Trp Pro
                              485   490   495

Thr Thr Pro Thr Asn Val Val Thr Asp Ser Ala Phe Val Ala Lys Met
              500   505   510

Leu Leu Lys Met Gly Gln Glu Gly Val Pro Ser Thr Ala Ala Ala Phe
      515   520   525

Ile Leu Glu Asp Ala Leu Ser Gln Arg Ser Ala Met Ala Ala Val Leu
      530   535   540

His Val Arg Ser His Ser Glu Val Pro Gly Phe Phe Thr Glu Gly Asn
545   550   555   560

Asp Val Ala Asp Ser Gln Ala Thr Phe Gln Ala Tyr Pro Leu Arg Glu
                  565   570   575

Ala Lys Asp Leu His Thr Ala Leu His Ile Gly Pro Arg Ala Leu Ser
            580   585   590

Lys Ala Cys Asn Ile Ser Met Gln Gln Ala Arg Glu Val Val Gln Thr
            595   600   605

Cys Pro His Cys Asn Ser Ala Pro Ala Leu Glu Ala Gly Val Asn Pro
      610   615   620

Arg Gly Leu Gly Pro Leu Gln Ile Trp Gln Thr Asp Phe Thr Leu Glu
625   630   635   640

Pro Arg Met Ala Pro Arg Ser Trp Leu Ala Val Thr Val Asp Thr Ala
                  645   650   655

Ser Ser Ala Ile Val Val Thr Gln His Gly Arg Val Thr Ser Val Ala
                  660   665   670

Ala Gln His His Trp Ala Thr Ala Ile Ala Val Leu Gly Arg Pro Lys
            675   680   685

Ala Ile Lys Thr Asp Asn Gly Ser Cys Phe Thr Ser Lys Ser Thr Arg
            690   695   700

Glu Trp Leu Ala Arg Trp Gly Ile Ala His Thr Thr Gly Ile Pro Gly
                              710   715   720
705

Asn Ser Gln Gly Gln Ala Met Val Glu Arg Ala Asn Arg Leu Leu Lys
                  725   730   735

Asp Lys Ile Arg Val Leu Ala Glu Gly Asp Gly Phe Met Lys Arg Ile
            740   745   750

Pro Thr Ser Lys Gln Gly Glu Leu Leu Ala Lys Ala Met Tyr Ala Leu
            755   760   765

Asn His Phe Glu Arg Gly Glu Asn Thr Lys Thr Pro Ile Gln Lys His

                                    7

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Trp Arg Pro Thr Val Leu Thr Glu Gly Pro Pro Val Lys Ile Arg Ile
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Glu Thr Gly Glu Trp Glu Lys Gly Trp Asn Val Leu Val Trp Gly Arg
                     805             810                    815
Gly Tyr Ala Ala Val Lys Asn Arg Asp Thr Asp Lys Val Ile Trp Val
                 820             825                    830
Pro Ser Arg Lys Val Lys Pro Asp Ile Ala Gln Lys Asp Glu Val Thr
             835                 840             845
Lys Lys Asp Glu Ala Ser Pro Leu Phe Ala
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<210> 8
<211> 62
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

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<210> 9
<211> 65
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 9
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<210> 10
<211> 425
<212> DNA
<213> Escherichia coli

<400> 10
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<210> 11
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 11                                                                31
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<210> 12
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

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<210> 13
<211> 2155
<212> DNA
<213> Escherichia coli

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<210> 14
<211> 3139
<212> DNA
<213> Escherichia coli
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<213> Artificial Sequence

<220>
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<220>
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